# Coastal Ocean Research and Monitoring Program (CORMP)

Region: Southeast, North Carolina, South Carolina

Date Project Initiated: June 2002 (current number: NA16RP2675)

# **Brief Project Summary**

The Coastal Ocean Research and Monitoring Program (CORMP) is a research and observation program focusing on the collection of data applicable to physical and ecological predictive models, fisheries sustainability, and habitat quality. The information collected by CORMP helps researchers determine a mechanistic understanding of factors affecting productivity in the region's coastal ocean and provides information for use in local-to-federal fisheries management. Information collected by CORMP real-time systems with hourly updates are used by partner organizations to provide a real-time forecasting and nowcasting system that enhances the prediction of conditions in the coastal ocean.



• CORMP meteorological and oceanographic data are disseminated to a large public audience through inclusion in a diversity of weather reports and specialty Web sites.

CORMP maintains its own Web site (www.cormp.org) that displays all of the near-real-time data from buoys and piers. That same information is used by the local newspaper (Wilmington Star News) to report local conditions; NOAA's National Weather Service-Wilmington Forecast Office for current observations, marine weather observations and forecasts, surf zone forecasts, and rip current forecasts (www.weather.gov/ilm/); and the following Web sites that target coastal fishermen, mariners, and sailors in the southeastern North Carolina region: www.ncwaterman.com, www.fryingpantower.com, and www.sailflow.com.

#### Carolinas Coast Web Site

 The goal of the Carolinas Coast project is to package and present National Weather Service products along with data collected by regional coastal ocean observing systems in real-time on the Internet. This Web site provides a simple, standardized Web-based graphical interface to access current forecasts, consolidated coastal ocean observations, and coastal hazards information, as well as tide charts for North Carolina and South Carolina. The target audience for this product is the general marine community, including coastal town managers, recreational and commercial mariners, beachgoers, surfers, scuba divers, fishermen, marine and beach safety officials, and the public. The Carolinas Coast Web site is based on ongoing efforts by the Carolinas Coastal Ocean Observing and Prediction System (Caro-COOPS) at the University of South Carolina, the University of North Carolina Wilmington's CORMP, and NOAA's weather forecast offices in Wilmington, North Carolina.

#### Department of Defense Support

 In North Carolina, the cost of beach renourishment has nearly doubled since 2002 (i.e., the 2006 Wrightsville Beach renourishment cost \$7.26 million, up from \$4.3 million in 2002). CORMP is working with the U.S. Army Corps of Engineers offices in Wilmington and Duck, North Carolina, to coordinate sensor reporting schemes, data analyses, and data sharing between the two organizations, providing the Corps

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This project is contributing to the Integrated Ocean Observing System (IOOS) by

- Contributing to the Southeast Coastal Ocean Observing Regional Association (SECOORA)
- Providing information and data related to coastal hazards and fisheries
- Building strong partnerships with the National Weather Service, Department of Defense, National Marine Fisheries Service, and U.S. Marine Corps



with a better understanding of the coastal processes leading to beach erosion in North Carolina. The Corps will apply information collected by CORMP's established array of offshore buoys and pier-based stations to various Corps projects, including 1) development of a regional sediment management plan, 2) wave and circulation modeling in Long Bay, 3) Cape Fear Harbor dredging project, and 4) standardization of acoustic doppler current profiler reporting (equipment that measures currents and waves).

# Fisheries Management

- The CORMP fisheries program is filling information gaps for several economically important species, including blue crab (North Carolina's top commercial fishery: 2005, \$20,253,134), shrimp (second largest fishery: 2005, \$4,403,318), and blue fish, an important recreational species.
  - CORMP has assisted with the blue crab tag-and-release program sponsored by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service and performed nearly 70 percent of the successful taggings.
  - CORMP regularly provides data to the North Carolina Division of Marine Fisheries on shrimp counts, weight, size distribution, and location to assist with its shrimp monitoring program.
  - CORMP is also a participant in the NOAA, National Marine Fisheries Service, and Rutgers Cooperative Marine Education and Research Program's Bluefish Research Program, which initiated a coordinated coastwide survey of bluefish recruitment in 2004. CORMP data on bluefish recruitment patterns for the North Carolina coast have been included with data from other coastal participants (NY, NJ, MD, FL) in annual reports to Rutgers. The goal of the coastwide survey is to produce an annual coastwide recruitment index that can be made available to fishery management agencies (Mid-Atlantic Fisheries Management Council and the Atlantic States Marine Fisheries Commission) to assist future bluefish stock assessments and population modeling.

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**Project Web Site** 

www.cormp.org

